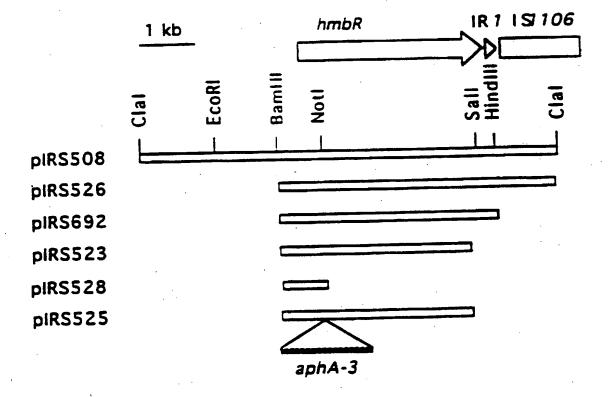
Figure 1



SHEET 2/47

TACAACGGCGAACACGCGCGCGCCACCTCGCTCCGCATCCCGACGGGCCGCGCAAACA 360 **AATCGAACCAAATAAACAAGGTCTCGGCATAGCTGTTTGCAGGGACCTTTAATTACACGG** CTGGCGCGCTTCGTCGAGCATCTGAACGCTTTGAACCTGACTCCCGAAGCCGAAGCGGA **AGAACTAGT<u>GGATCC</u>AATTTGGGCGCGCGTTTTTGTTCAAACACGCCCAAAAACTCGAT AGCCATTCAAGGCGCGCGAAGCCTTTGCATTCTACAAAGTCGTGTTGCGCGAAACCT** Ø **CGGCTTGGCAGCCGATGCCGAAGCCCCCGAAGGTATGATGCCGCACAGGCACTAAAAA** TTATTCGCTAACCGATGGATGAACAATCCATACATCTT<u>GAGTT</u>GATAATATGAAACCAT BamHI

FIG. 2B

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5.10
2 6 0
AGATGAAGCTGCAACTGAAACCACCCGTTAAGGCAGAGGTAAAAGCAGTGCGCGTTAA
aAspGluAlaAlaThrGluThrThrProValLysAlaGluValLysAlaValArgValLy
610
AGGCCAGCGCAATGCGCCTGCGGCTGTGAACGTCAACCTTAACCGTAAACAAGA
sGlyGlnArgAsnAlaProAlaAlaValGluArgValAsnLeuAsnArgIleLysGlnGl
710
AATGATACGCGACAAAAGACTTGGTGCGCTATTCCACCGATGTCGGCTTGAGCGACAG
uMetIleArgAspAsnLysAspLeuValArgTyrSerThrAspValGlyLeuSerAspSe
AAAAGGCTTT
rGlyArgHisGlnLysGlyPheAlaValArgGlyValGluGlyAsnArgValGlyValSe 810
rIleAspGlyValAsnLeuProAspSerGluGluAsnSerLeuTyrAlaArgTyrGlyAs 860
CTTCAACAGCTCGGTCTGTCTATCGACCCCGAACTCGTGCGCAACATCGACATCGTAAA "Bhoose se s

FIG. 2C

CCTGCAAGGACGTGACTTACTGTTGCCTGAACGGCAGTTCGGCGTGATGAAAAACGG **AGGGGCGGACTCTTTCAATACCGGCAGCGGCGCCTTGGGCGGCGGCGGTGTGAATTACCAAAC** TTACAGCACGCGTAACCGTGAATGGACAAATACCCTCGGTTTCGGCGTGAGCAACGACCG CGTGGATGCCGCTTTGCTATTCGCAACGGCGGGCCATGAAACTGAAAGCGCGGGCAA GCGTGGTTATCCGGTAGAGGGTGCTGGTAGCGGAGCGAATATCCGTGGTTCTGCGCGCG s Gly Ala Asp Ser Phe Asn Thr Gly Ser Gly Ala Leu Gly Gly Gly Val Asn Tyr Gln Th gValAspAlaAlaLeuLeuTyrSerGlnArgArgGlyHisGluThrGluSerAlaGlyLy CAACGACAACCACCGCATCGGCGCATCGCTCAACGGTCAGCAGGGGCATAATTACACGGT 260 sArgGlyTyrProValGluGlyAlaGlySerGlyAlaAsnIleArgGlySerAlaArgG r Leu Gln Gly Arg Asp Leu Leu Leu Pro Glu Arg Gln Phe Gly Val Met Lys Asn G y Tyr Ser Thr Arg Asn Arg Glu Trp Thr Asn Thr Leu Gly Phe Gly Val Ser Asn Asp A e Asn Asp Asn His Arg Ile Gly Ala Ser Leu Asn Gly Gln Gln Gly His Asn Tyr Thr V TATTCCTGATCCGTCCCAACACACACACACACACACCTTCTTGGGTAAGATTGCTTATCAAA y I le Pro Asp Pro Ser Gln His Lys Tyr His Ser Phe Leu Gly Lys I le Ala Tyr Gln I 1060

FIG. 2D

1360
TGAAGAGTCTTACAACCTGCTTGCTTCTTATTGGCGTGAAGCTGACGATGTCAACAGACG IGluGluSerTyrAsnLeuLeuAlaSerTyrTrpArgGluAlaAspAspValAsnArgAr 1410
GCGTAACACCAACCTCTTTACGAATGGACGCCGGAATCCGACCGGTTGTCTATGGTAAA gArgAsnThrAsnLeuPheTyrGluTrpThrProGluSerAspArgLeuSerMetValLy 1460
AGCGGATGTCGATTATCAAAAAACCAAAGTATCTGCGGTCAACTACAAGGTTCGTTC
GCAACTCGGGGGGGGGGCGACACCGCCTGTCGTTTAAAACTTTCGCCAGCCGCCGTGATTT uGlnLeuGlyGlyGlyArgHisArgLeuSerPheLysThrPheAlaSerArgArgApPh 1710
TGAAAACCTAAACCGCGACGATTATTACTTCAGCGGCCGTGTTGTTCGAACCACCAGCAG

FIG. 2E

	CGGTTCGGGTAATTGGCTGCCCAATCCCAACCTGAAAGCCGAGCGCACGACCACCACAC sGlySerGlyAsnTrpLeuProAsnProAsnLeuLysAlaGluArgThrThrHisTh 2110	CGACATTACTTCCGGCTACCGTGTCCCCAATGCGTCCGAAGTGTATTTCACTTACAACCA rAsplieThrSerGlyTyrArgValProAsnAlaSerGluValTyrPheThrTyrAsnHi 2060	GTGTCATGCTTGTGACAAAAC uCysHisAlaCysAspLysTh	GAACGACGTGTTCAGTAGCCGCGCAGGTATCCGTTACGATCATACCAAAATGACGCCTCA PAsnAspValPheSerSerArgAlaGlyIleArgTyrAspHisThrLysMETThrProG1 1910	TATCCAGCATCCGGTGAAAACCACCACTACGGTTTCTCACTGTCTGACCAAATTCAATG	1760
3ACATTACTTCCGGCTACCGTGTCCCCAATGCGTCCGAAGTGTATTTCACTTACAACCA AsplieThrSerGlyTyrArgValProAsnAlaSerGluValTyrPheThrTyrAsnHi 2060 GTTCGGGTAATTGGCTGCCCAATCCCAACCTGAAAGCCGAGCGCACGACCACAC 11ySerGlyAsnTrpLeuProAsnProAsnLeuLysAlaGluArgThrThrHisTh 2110	ACATTACTTCCGGCTACCGTGTCCCCAATGCGTCCGAAGTGTATTTCACTTACAACCA AsplicThrSerGlyTyrArgValProAsnAlaSerGluValTyrPheThrTyrAsnHi 2060			GGAATTGAATGCCGAGTGTCATGCTTGTGACAAACACGCCTGCAGCCAACACTTATAAnGluLeuAsnAlaGluCysHisAlaCysAspLysThrProProAlaAlaAsnThrTyrLy		ATCCAGCATCCGGTGAAAACCACCAACTACGGTTTCTCACTGTCTGACCAAATTCAATG I 1 e G 1 n H i s P r o Va 1 L y s T h r T h r A s n T y r G 1 y P h e S e r L e u S e r A s p G 1 n I 1 e G 1 n T r 1 8 1 0 AACGACGTGTTCAGTAGCCGCGCGGGTATCCGTTACGATCATACCAAAATGACGCCTCA A s n A s p Va 1 P h e S e r S e r A r g A 1 a G 1 y I 1 e A r g T y r A s p H i s T h r L y s METT h r P r o G 1 3 AATTGAATGCCGAGTGTCATGCTTGTGACAAAACACCCGCCTGCAGCACACTTATAA 3 1 u L e u A s n A 1 a G 1 u C y s H i s A 1 a C y s A s p L y s T h r P r o P r o A 1 a A 1 a A s n T h r T y r L y 19 6 0

FIG. 2F

2210
TACCGCAATTTCCTGTCTGAAGAGCAGAAGCTGACCACCAGCGGCGATGTCAGCTG
nTyrArgAsnPheLeuSerGluGluGlnLysLeuThrThrSerGlyAspValSerCysTh 2260
TCAGATGAATTACTACTACGGTATGTGTAGCAATCCTTATTCCGAAAAACTGGAATGGCA
rGlnMetAsnTyrTyrGlyMetCysSerAsnProTyrSerGluLysLeuGluTrpGl
2310
GATGCAAAATATCGACAAGGCCAGAATCCGCGGTATCGAGCTGACGGGCCGTCTGAATGT
nMetGinAsnIleAspLysAlaArgIleArgGlyIleGluLeuThrGlyArgLeuAsnVa
2360
GGACAAAGTAGCGTCTTTTGTTCCTGAGGGCTGGAAACTGTTCGGCTCGCTGGGTTATGC
alAlaSerPheValProGluGlyTrpLysLeuPheGlySerLeuGlyTyrA
2460
GAAAAGCAAACTGTCGGGCGACAACAGCCTGCTGTCCACCCAGCCGTTGAAAGTGATTGC
aLysSerLysLeuSerGlyAspAsnSerLeuLeuSerThrGlnProLeuLysValIleAl
2510
CGGTATCGACTATGAAAGTCCGAGCGAAAAATGGGGCGTGTTCTCCCGCCTGACCTATCT
2560
GGGCGCGAAAAAGGTCAAAGACGCGCAATACACCGTTTATGAAAACAAGGGCTGGGGTAC

FIG. 2G

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2610	_
 AAAGGTAAAAGATTACCCGTG	ပ
rProLeuGinLysLysVaiLysAspTyrProTrpLeuAsnLysSerAlaTyrVai 2660	ValPheAs
TATGTACGGCTTCTACAAACCGGTGAAAACCTGACTTGCGTGCAGGCGTATATATGT pMetTyrGlyPheTyrLysProValLysAsnLeuThrLeuArgAlaGlyValTyrAsnVa	I AI AS II Va Tyr As II Va
. –	2760
	AGCACCAC
heAsnArgLysTy	SerThrTh
7810	
CGGTCGACCGCGATGGCAAAGGCTTAGACCGCTA	CGTAATTA
rAsnSerValAspArgAspGlyLysGlyLeuAspArgTyrArgAlaProSer <u>Arg</u> AsnI 2860	Argasnly
	TTGTTGAA
ralavalserLeugluTrpLys <u>Phe</u> STOP	
2910	
AATTAAAGCCGTCCGAATTGTGTTCAAGAACTCATTCGGACGGTTTTTACCGAAT	AATCTGTG
2960	
TGTGGGTTTATAGTGGATTAACAAAATCAGGACAAGGCGACGAAGCCGCAGACAGTACA	ACAGTACA

7IG. 2H

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CCGAAACCCAAACACAGGTTTTCGGCTGTTTTCGCCCCAAATACCTCCTAATTGTACCCA 3060 3010

GCGGGCGCACTTAACCTGTTGGCGGCTTTCAAAGGTTCAAACACACATCGCCTTCAGGTGC

AATACCCCTTAATCCTCCCGATACCCGATAATCAGGCATCCGGCGCCTTTAGGCGGCA

TGCAGCGTACCG<u>AAGCTT</u>
HindIII

Figure 3

SHEET 10/47

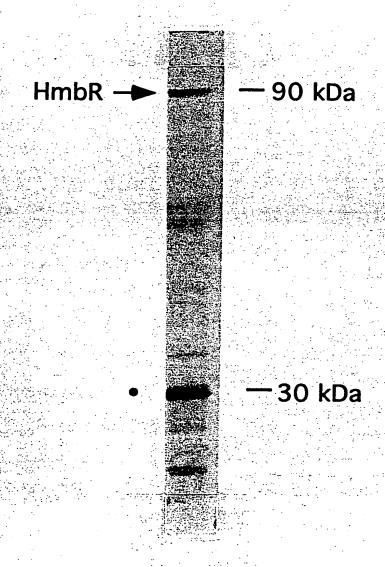


FIG. 4A

SHEET 11/47

TBP1M	MQQQHLFRLNILCLSLMTALPVYA ENVQAEQAQEKQLDTIOVKAKKQ	4 7
LBPA	MNKKHGFQLTLTALAVAAAFPSYAANPETAAPDAAQTQSLKEVTVRAAKV	5 0
HMBR	MKPLQMLPIAALVGSIFGN-PVFAADEAATETTPVKAEVKAVR	4 3
	*	
TBP1M	KTRRDNEVTGLGKLVKSSDTLSKEQVLNIRDLTRYDPGI AVVEQGRGASS	9 7
LBPA	- GRRSKEATGLGKIAKTSETLNKEQVLGIRDLTRYDPGVAVVEQGNGASG	6 6
HMBR	KGQRNA - PAAVERV NLNR I KQEMIRDNKDL VRY STDVGL SD SGRHQK -	8 0
	* * * * * * * * * * * * * * * * * * * *	
TBP1M	GYS I RGMDKNRVSLTVDGVSQ I QSYTAQAALGGTRTAGS SGA I NE I EYEN	1 4
LBPA	GYSIRGVDKNRVAVSVDGVAQIQAFTVQGSLSGYGGRGGSGAINEIEYEN	1 4
HMBR	GFAVRGVEGNRVGVSIDGVNLPDS EENSLYARYGNFNSSRLS - IDPEL	1 3
	* * * * * * * * * * * * * * * * * * * *	
TBP1M	VKAVE I SKGSNS SEYGNGALAGSVAFQTKTAAD I I GEGKQWG I QSKTAY S	19
LBPA	I S T V E I D K G A G S S D H G S G A L G G A V A F R T K E A A D L I S D G K S W G I Q A K T A Y G	1 9
HMBR	VRN I D I VKGAD S FNTG S GALGGGVYNQTLQGRDLLL P ERQFGVMMKNGY S	1 8
	* * * * * * * * * * * * * * * * * * * *	
TBP1M	GKDHALTQSLALAGRSGGAEALLIYTKRRGREIHAHKDAGKGVQ - SFNRL	2 4
LBPA	SKNRQFMK SLGAGF SKDGWEGLL I RTBRQGRETHPHGD I ADGVAYG I NRL	2 4
HMBR	TRNREWTNTLGFGVSNDRVDAALLYSQRRGHETESAG	2 2

OSSESSE, OSIGOO

FIG. 4B

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TBP1M	CRFGNNT	601
L B P A HMB R	SVCGY I ET LRSRKCVPRK I NGSN I H I SLNDRFS I GKYFDFSLGGKYDKKN SSIQHPVKTTNYGFSLSDQ I QWNDVFSSRAG I RYDHTK	0 3 4
TBP1M	THSED KSVSTGTHRNLSWNAGVVLKP FTWMDLTYRASTGF	641
LBPA	FTTSE ELVRSGRYVDRSWNSGIVFKP NRHFSLSYRASSGF	675
HMBR	MTPQELNAECHACDKTPPAANTYKGWSGFVGLAAQLNQAWRVGYDITSGY	5 1 0
TBP1M	RLPSFAEMYGWRA GESLKTLDLKPEKSFNREAGIVFKGDFGNLEAS	687
LBPA	RTPSFQELFGIDIYHDYPKGWQRPALKSEKAANREIGLQWKGDFGFLEIS	725
HMBR	RVPNASEVY - FTYNHGSGNWLPNPNLKAERTTTHTLSLQGRSEKGTLDAN	5 5 9
TBP1M	YFNNAYRDLIAFGYET RTQNGQTSASGDPGYR	7 1 9
LBPA	SFRNRYTDMIAVADHKTKLPNQAGQLTEIDIRDYY	760
HMBR	LYQSNYRNFLS EEQKLTT - SGDVSCTQMNYYYGMCSNPYSEKLEWQM	6 0 5
TBP1M	- NAQNARIAGINILGKIDWHGVWGGLPDG LYSTLAYNRIKVKDADIRA	766
LBPA	- NAQNMSLQGVNILGKIDWNGVYGKLPEG LYTTLAYNRIKPKSVSNRP	8 0 7
HMBR	QNIDKARIRGIELTGRLNVDKVASFVPEGWKLFGSLGYAKSKLSG	0 2 9

FIG. 4C

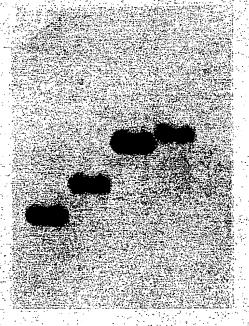
SHEET 13/47

FBP1M LBPA HMBR	DRTFVTSYLFDAVQPSRYVLGLGYDHPDGIWGINTMFTYSKAKSVDE GLSL-RSYALDAVQPSRYVLGFGYDQPEGKWGANIMLTYSKGKNPDE DNSLLSTQPLKVIAGIDYESPSEKWGVFSRLTYLGAKKVKDAQY ** ** ** ** ** ** ** ** ** ** ** ** **	8 1 3 8 5 3 6 9 4
FBP1M LBPA HMBR	- LLGSQALLNGNANAKKAASRRTRPWYVTDVSGYYNIKKHLTLRAGVYNL - L AYLAGDQK - RYSTKRASSSWSTADVSAYLNLKKRLTLRAAIYNI TVYENKGWGTPLQKKVKDYPWLNKSAYVFDMYGFYKPVKNLTLRAGVYNV * * * * * * * * * * * * * * * * * * *	862
TBP1M LBPA HMBR	LNYRYVTWENVRQ TAGGAVNQHKNVGVYNRYAAPGRNYTFSLEMKF GNYRYVTWESLRQ TAESTANRHGGDSNYGRYAAPGRNFSLALEMKF FNRKYTTWDSLRGLYSYSTTNSVDRDGKGLDRYRAPSRNYAVSLEWKF	9 0 8 9 4 3 7 9 2 2

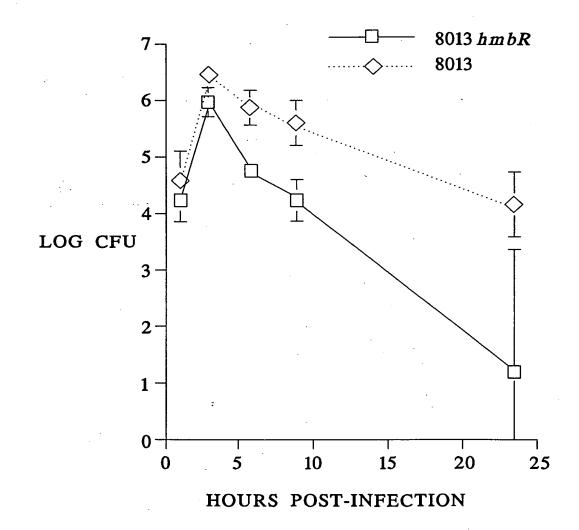
Figure 5

SHEET 14/47

1 2 3 4



- —12 kb
- 6 kb
- -4 kb
- 3 kb
- 2 kb
- 1 kb



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6/47	48	96	144	192	240	288
SHEET 16/47						
SH	ATT Ile	ACA Thr	AAT Asn	GAA Glu	66C 61y 80	GTG Val
	AGT Ser 15	ACC Thr	CGC Arg	CAA Gln	GTC Val	GGC Gly 95
	GGC Gly	GAA Glu 30	CAG Gln	AAA Lys	GAT Asp	CGC Arg
	CTC Leu	ACT Thr	GGT Gly 45	ATC Ile	ACC Thr	ATT Ile
7A	CTG Leu	GCA Ala	AAA Lys	CGT Arg 60	TCC Ser	GCC Ala
FIG. 7A	GCG Ala	GCT Ala	GTT Val	AAC Asn	TAT Tyr 75	TTT Phe
 	GCC Ala 10	GAA Glu	CGC Arg	CTT	CGC Arg	660 617 90
	ATC Ile	GAT Asp 25	GTG Val	AAC Asn	GTG Val	AAA Lys
	CCT	GCA Ala	GCA Ala 40	GTC Val	TTG Leu	CAA Gln
	CCC	GCG Ala	AAA Lys	CGC Arg 55	GAC Asp	CAT
	ATG Met	TTT Phe	GTA Val	GAA Glu	AAA Lys 70	CGT Arg
	CAA Gln 5	GTC Val	GAG Glu	GTG Val	AAT Asn	AGC Ser 85
	TTA Leu	CCG Pro 20	GCA Ala	GCT Ala	GAC Asp	AGG Arg
	CCA	AAT Asn	AAG Lys 35	GCG Ala	CGC Arg	GAC Asp
	AAA Lys	GGC Gly	GTT Val	CCT Pro 50	ATA Ile	AGC
	ATG Met	TTC Phe	CCC	GCG Ala	ATG Met 65	TTG

OSSSEE COLSCO

17/47	336	384	432	480	528	576
SHEET 1						
·	GAT Asp	TCG Ser	AAA Lys	GTG Val 160	CAG Gln	TGG Trp
	CCT Pro 110	AGC Ser	GTA Val	GGT Gly	CGG Arg 175	GAA
	CTG	AAC Asn	ATC Ile	GGC Gly	GAA Glu	CGT Arg 190
	AAC Asn	TTC Phe 125	GAC Asp	GGC Gly	CCT Pro	AAC Asn
JB	GTA Val	AAC Asn	ATC Ile 140	TTG Leu	TTG Leu	CGT Arg
FIG. 7B	GAC GGC Asp Gly	GGC Gly	AAC Asn	GCC Ala 155	CTG	ACG Thr
r¶	GAC Asp	TAT Tyr	CGC Arg	GGC Gly	TTA Leu 170	AGC Ser
	ATT Ile 105	CGT Arg	GTG Val	AGC	GAC Asp	TAC Tyr 185
	AGT Ser	GCC Ala 120	CTC	GGC Gly	CGT Arg	GGT Gly
	GTT Val	TAC TYr	GAA Glu 135	ACC Thr	GGA Gly	AAC Asn
٠	GGC G1γ	CTG Leu	CCC Pro	AAT Asn 150	CAA Gln	AAA Lys
	GTC Val	TCG Ser	GAC Asp	TTC Phe	CTG Leu 165	ATG Met
	CGT Arg 100	AAC Asn	ATC Ile	TCT Ser	ACC Thr	ATG Met 180
	GAC Asp	GAA Glu 115	TCT Ser	GAC Asp	CAA Gln	GTG Val
	GGC G1 y	GAA Glu	CTG Leu 130	GCG Ala	TAC Tyr	GGC Gly
	GAA Glu	A C C C C C C C C C C C C C C C C C C C	CGT Arg	GGG Gly 145	AAT Asn	TTC

DSEEZZS LOZIGO

147	624	672	720	768	816	864
SHEET 18/47			•	•		
HE			•			
S	GCT Ala	AAG Lys	GGT Gly 240	TTC Phe	GCA Ala	\mathtt{TAC}
	GCC Ala	GGC	CGT Arg	AGC Ser 255	66C 61y	TCT
	GAT Asp	GCG Ala	ATC Ile	CAC	ATC Ile 270	GAG Glu
	GTG Val 205	AGC	AAT Asn	TAC TYr	CGC Arg	GAA Glu 285
7C	CGC	GAA Glu 220	GCG Ala	AAA Lys	CAC His	GTT Val
FIG. 7C	AAC GAC Asn Asp	GAA ACT Glu Thr	GGA G1y 235	CAC His	AAC Asn	ACG Thr
	AAC Asn	GAA Glu	AGC Ser	CAA Gln 250	GAC	TAC Tyr
	AGC	CAT His	GGT	TCC Ser	AAC Asn 265	AAT Asn
	GTG Val	GGC Gly	GCT Ala	CCG Pro	ATC Ile	CAT His 280
	GGC G1y	CGC Arg 215	GGT Gly	GAT Asp	CAA Gln	GGG
	TTC Phe	CGG	GAG Glu 230	CCT Pro	TAT Tyr	CAG Gln
	GGT Gly	CAA Gln	GTA Val	ATT Ile 245	GCT Ala	CAG Gln
	CIC	TCG	CCG	GGT Gly	ATT Ile 260	GGT Gly
	ACC Thr 195	TAT Tyr	TAT Tyr	CGC Arg	AAG Lys	AAC Asn 275
	AAT Asn	CTG Leu 210	GGT Gly	GCG Ala	GGT Gly	CTC Leu
	ACA Thr	TTG	CGT Arg 225	S e r	TTG	TCG Ser

OSESSE OSISOC

SHEET 19/47	912	096	1008	1056	1104	1152
SH						•
	CGG Arg	TTG Leu 320	GCG Ala	ACC Thr	GAT Asp	CAA Gln
	AGA Arg	CGG Arg	TCT Ser 335	GAA Glu	ATG Met	TTG Leu
	AAC Asn	GAC Asp	GTA Val	766 7rp 350	AGC Ser	CCG
	GTC Val	TCC	AAA Lys	ACA Thr	CGC Arg 365	CAT His
7D	GAT Asp 300	GAA Glu	ACC Thr	ACC Thr	AAC Asn	AGC Ser 380
FIG. 7D	GCT GAC Ala Asp	CCG Pro 315	AAA Lys	TAC	TAT Tyr	ATG GAC Met Asp
<u> </u>		ACG Thr	CAA Gln 330	AAT Asn	ATC Ile	ATG Met
	GAA Glu	TGG Trp	TAT Tyr	ACG Thr 345	GAA Glu	CGT Arg
	CGT Arg	GAA Glu	GAT Asp	CCG Pro	GGC Gly 360	CTG
	TGG Trp 295	TAC Tyr	GTC Val	TTC	GTT Val	ACG Thr 375
٠.	TAT Tyr	TTT Phe 310	GAT Asp	TCG	GAA Glu	ATT Ile
	Ser	CIC	GCG Ala 325	GGT Gly	AAG Lys	CGT Arg
	GCT	AAC Asn	AAA Lys	AAA Lys 340	AAA Lys	AAA Lys
	CTT Leu	ACC Thr	GTA Val	TAC TYr	CAT His 355	TTC Phe
	CTG Leu 290	AAC Asn	ATG Met	AAC Asn	TAC Tyr	ACC Thr 370
	AAC Asn	CGT Arg 305	TCT	GTC Val	GAG Glu	ACA Thr

D9E5554.O91900

20/47	1200	1248	1296	1344	1392	1440
SHEET 20/47						
•,	CAG Gln 400	CGT	AAC Asn	AGT Ser	GAA Glu	AAC Asn 480
	666 G1y	GGC G1y 415	ACC Thr	TTC Phe	CAG Gln	GCC Ala
	GCC	AGC Ser	ACC Thr 430	GTG Val	CCT	GCA Ala
	TTT Phe	TTC	AAA Lys	GAC Asp 445	ACG Thr	CCT
Œ	ACC Thr	TAC Tyr	GTG Val	AAC Asn	ATG Met 460	CCG Pro
FIG. 7E	TTC AAA Phe Lys 395	TAC TYr	CCG	TGG Trp	AAA Lys	AAA ACA Lys Thr 475
. •	TTC	GAT Asp 410	CAT His	CAA Gln	ACC Thr	AAA Lys
	JCG	GAC Asp	CAG Gln 425	ATC Ile	CAC His	GAC Asp
	CIG	CGC Arg	ATC Ile	CAA Gln 440	GAC Asp	TGT Cys
	CGC Arg	AAC Asn	AGT Ser	GAC Asp	TAC TYr 455	GCT Ala
	CAC His 390	TTA	AAC Asn	TCC Ser	CGT Arg	CAT His 470
	CGA Arg	AAC Asn 405	ACC Thr	CTG	ATC Ile	TGT Cys
	666 61y	GAA Glu	ACC Thr 420	TCG Ser	GGT Gly	GAC
,	666 61y	TTT Phe	CGA Arg	TTC Phe 435	GCA Ala	GCC Ala
	666 61y	GAT Asp	GTT Val	GGT Gly	CGC Arg 450	AAT Asn
	CTC Beu 385	CGT	GTT Val	TAC	AGC Ser	TTG Leu 465

ogezze ograco

21/47	1488	1536	1584	1632	1680	1728
SHEET					· .	
•	AGC Ser	CCG	TGG Trp	CTG Leu	TAT TYr 560	GTC Val
	CTG Leu 495	GTG Val	ACT Thr	ACC Thr	CTG	ACT Thr 575
	CAG Gln	CGC Arg 510	GGC G1y	CAC	AAC Asn	CTG
	GCG Ala	TTC	TCG Ser 525	ACC Thr	GCC Ala	AAT Asn
Æ	GCG Ala	GGT Gly	GGT Gly	ACC Thr 540	GAT Asp	CAG Gln
FIG. 7F	GGC TTG Gly Leu 490	TCA Ser	CAC	AGC Ser	CTG Leu 555	GAG
,	GGC Gly 490	ACC Thr	AAC Asn	CGC Arg	ACA Thr	GAA Glu 570
	GTC	GTG Val 505	TAC Tyr	GAA Glu	GGG G1y	TCG
	TTT Phe	GAT Asp	ACT Thr 520	GCA Ala	AAA Lys	CTG
	GGA Gly	TAC Tyr	TTC Phe	AAG Lys 535	GAC Asp	TTC
	AGC Ser	GGT Gly	TAT Tyr	TTG Leu	GGC Gly 550	AAC Asn
	TGG Trp 485	TTG Leu	GTG Val	AAT Asn	CGC Arg	CGA Arg 565
	GGC.	CGT Arg 500	GAA Glu	CCT	GGG Gly	TAC Tyr
	AAA Lys	TGG Trp	TCT Ser 515	AAT Asn	CAG Gln	AAT Asn
	TAT Tyr	ACA Thr	GCG Ala	CCT Pro 530	TTG Leu	AGC Ser
	ACT	CAA Gln	AAT Asn	AAG Lys	TCC Ser 545	CAA Gln

noessa.core

SHEET 22/47	1776	1824	1872	1920	1968	2016
•	TGC	GAC Asp	GAC Asp	CTG Leu 640	ACA Thr	GAA Glu
	AGA Arg	ATC Ile	GTG Val	TCG	TCC Ser 655	AGC Ser
	TAT TYr 590	AAT Asn	AAT Asn	TTC GGC Phe Gly	CTG	CCG Pro 670
٠	TAC Tyr	AAA Lys 605	CTG Leu	TTC GGC Phe Gly	CTG Leu	AGT
7G	TAC Tyr	ATG Met	CGT Arg 620	CTG	AGC Ser	GAA AGT Glu Ser
FIG. 7G	GAT GCT Asp Ala	CAG Gln	GGC Gly	AAA Lys 635	AAC Asn	TAT Tyr
, — 1	GAT Asp	TGG Trp	ACA Thr	TGG Trp	GAC Asp 650	GAC Asp
	GAG Glu 585	GAT Asp	TTG Leu	GGT Gly	GGC Gly	ATC Ile 665
	GAG Glu	CTG Leu 600	GAG Glu	GAG Glu	TCG	GGT
	ACT	AAA Lys	ATC Ile 615	CCT	CTG	GCC Ala
	TGT Cys	GAA Glu	GGT Gly	GTT Val 630	AAA Lys	ATT Ile
	66C 61y	AAA Lys	CGC Arg	TTT Phe	AGC Ser 645	GTG
	CCC Pro 580	CCC TAC Pro Tyr 595	ATC Ile	TCT Ser	AAA Lys	AAA Lys 660
	ACA Thr		AGA	GCG Ala	GCG Ala	CTG
	66C 61y	GAC Asp	GCC Ala 610	GTA Val	TAT Tyr	CCG
	AGC Ser	AGC Ser	AAG Lys	AAA Lys 625	GGT Gly	CAG Gln

COSESSE COLOCO

SHEET 23/47	2064	2112	2160	2208	2256	2204
SHE						
•	GTC	CCT	TAT Tyr 720	TTG Leu	GAT Asp	CGC Arg
	AAG Lys	ACG Thr	GCT Ala	ACT Thr 735	TGG Trp	GAC Asp
	AAA Lys	GGT Gly	TCG Ser	CTG Leu	ACT Thr 750	GTC
	GCG Ala 685	TGG Trp	AAG Lys	AAA AAC Lys Asn	ACC Thr	GCG Ala 765
7H	GGC Gly	GGC G1y 700	AAC Asn	AAA Lys	TAC Tyr	AAT Asn
FIG. 7H	TAT CTA Tyr Leu	AAG Lys	CTG Leu 715	GCT Ala	AAA Lys	ACC Thr
	TAT Tyr	AAC Asn	TGG Trp	CCG Pro 730	CGC Arg	ACC Thr
	ACC Thr	GAA Glu	CCG	AAA Lys	AAC Asn 745	AGC
	CTG Leu 680	$\mathtt{TAT}\\\mathtt{TY} x$	TAC Tyr	TAC Tyr	TTC	TAC Tyr 760
	CGC Arg	GTT Val	GAT Asp	TTC	CTG	AGC Ser
	TCC	ACC Thr	AAA Lys 710	GGC Gly	AAC Asn	TAT Tyr
	TTC Phe	TAC Tyr	GTA Val	TAC Tyr 725	TAC Tyr	TTA Leu
	GTA Val	CAA Gln	AAG Lys	ATG Met	GTG Val 740	GGT Gly
·	GGC Gly 675	GCG Ala	AAA Lys	GAT Asp	GGC Gly	CGC Arg 755
	TGG Trp	GAC Asp 690	CAG Gln	TTT Phe	GCA Ala	CTG Leu
	AAA Lys	AAA Lys	TTG Leu 705	GTG Val	CGT Arg	JCC Ser
•						

SHEET 24/47	2352		
SHE			
	၁၁၅	Ala	
	AAT TAC GCC	Tyr	
	AAT	Asn	
	S GCC CCA GGC CGC 7	Arg	
71	GGC	Gly 780	
FIG. 7I	CCA	Pro	
	CCC	Ala Pro	
	Sec :	Arg	
	TAC	Tyr Arg	
	၁၅၁	Arg 775	
	GAC	Asp	
	TTA	Leu	
	CGC	Gly	
	AAA	Lys	
	395 GGC	G1y 770	
	GAT	Asp	

TAA *

TTT

TGG

GAA Glu

TCG CTG Ser Leu

GTA Val **785**

AAG Lys **790**

OSSESS COSTOC

SHEET 25/47	48	96	144	192	240	288
SHE						
	ATT Ile	ACA Thr	AAT Asn	GAA Glu	GGC G1y 80	GTG Val
	AGT Ser 15	ACC Thr	CGC Arg	CAA Gln	GTC Val	66C 61y 95
	GGC Gly	GAA Glu 30	CAG Gln	ATC AAA Ile Lys	GAT Asp	CGC Arg
	GTC	ACT	GGC G1y 45		ACC Thr	GTT Val
8 A	CTG	GCA Ala	AAA Lys	CGT Arg	TCC Ser	GCT
FIG. 8A	GCC GCG Ala Ala 10	GCT Ala	GTT Val	AAC Asn	TAT Tyr 75	TTT Phe
		GAA Glu	CGC Arg	CIT	CGC	66C 61y 90
	ATC Ile	GAT Asp	GTG Val	AAC Asn	GTG Val	AAA Lys
	CCT	GCA Ala 25	GCA Ala 40	GTC Val	TIG	CAT CAA His Glu
	CTC	GCG	AAA Lys	CGC Arg 55	GAC Asp	CAT
	ATG Met	TTT Phe	GTA Val	GAA CGC GTC Glu Arg Val 55	AAA GAC Lys Asp 70	CGC Arg
	TTA CAA Leu Gln 5	GTC Val	GAG Glu	GTG Val	AAC Asn	660 61y 85
		CCG Pro 20	GCA Ala	GCT Ala	GAC Asp	AGC Ser
	CCA	AAT Asn	AAG Lys 35	GCG Ala	CGC Arg	GAC Asp
	AAA Lys	66C 61y	GTT Val	CCT Pro 50	ATA Ile	AGC Ser
	ATG Met	TTC Phe	CCC	GCG Ala	ATG Met 65	TTG

DOSEESE LOGICA

26/47	336	384	432	480	528	576
SHEET 2						
	GAT	TCG Ser	AAA Lys	GTG Val 160	CAG Gln	TGG Trp
	CCT	AGC Ser	GTA Val	GGT Gly	CGG Arg 175	GAA Glu
	CTG Leu 110	AAC Asn	ATC Ile	GGC Gly	GAA CGG Glu Arg 175	CGT Arg
	AAC Asn	TTC Phe 125	GAC Asp	GGC	CCT	AAC Asn
8B	GTA Val	AAC Asn	ATC Ile 140	TTG Leu	TTG Leu	CGT
FIG. 8B	GAC GGC Asp Gly	GGC Gly	AAC Asn	GCC Ala 155	CTG Leu	ACG Thr
	GAC Asp	\mathtt{TAT} \mathtt{TY} \mathtt{T}	CGC Arg	66C G1y	TTA Leu 170	AGC Ser
	ATA Ile 105	CGT Arg	GTG Val	AGC Ser	GAC Asp	TAC Tyr 185
	AGC Ser	GCC Ala 120	CTC	GGC Gly	GGA CGT	GGT Gly
	GTG Val	TAC Tyr	GAA Glu 135	ACC Thr	GGA Gly	AAC Asn
	GGC G1y	CTG Leu	CCC	AAT Asn 150	CAA Gln	AAA Lys
	GTC Val	TCG Ser	GAC Asp	TTC Phe	CTG Leu 165	ATG Met
	CGT Arg 100	AAC Asn	ATC Ile	TCT Ser	ACC Thr	ATG Met 180
	AAC Asn	GAA Glu 115	TCT Ser	GAC Asp	CAA Gln	GT.G Val
	66C 61y	GAA Glu	CTG Leu 130	GCG Ala	TAC Tyr	GGC
	GAA Glu	TCC	CGT Arg	GGG Gly 145	AAT Asn	TTC

COESTED LOGICACO

SHEET 27/47	624	672	720	768	816	864
FIG. 8C	AAT ACC CTC GGT TTC GGC GTG AGC AAC GAC CGC GTG GAT GCC GCT Asn Thr Leu Gly Phe Gly Val Ser Asn Asp Arg Val Asp Ala Ala 195	CTG TAT TCG CAA CGG CGC GGC CAT GAA ACT GAA AGC GCG GGC AAG Leu Tyr Ser Gln Arg Arg Gly His Glu Thr Glu Ser Ala Gly Lys 210	GGT TAT CCG GTA GAG GGT GCT GGT AGC GGA GCG AAT ATC CGT GGT Gly Tyr Pro Val Glu Gly Ala Gly Ser Gly Ala Asn Ile Arg Gly 21y 230	GCG CGC GGT ATT CCT GAT CCG TCC CAA CAC AAA TAC CAC AGC TTC Ala Arg Gly Ile Pro Asp Pro Ser Gln His Lys Tyr His Ser Phe 245	GGT AAG ATT GCT TAT CAA ATC AAC GAC AAC CAC CGC ATC GGC GCA Gly Lys Ile Ala Tyr Gln Ile Asn Asp Asn His Arg Ile Gly Ala 260	CTC AAC GGT CAG CAG GGG CAT AAT TAC ACG GTT GAA GAG TCT TAC Leu Asn Gly Gln Gly His Asn Tyr Thr Val Glu Glu Ser Tyr 275
	ACA	TTG	CGT Arg	Ser	TTG	TCG

DOGESTS . COLUMN

SHEET 28/47	911	096	1008	1056	1104	1152
	A CGG 9 Arg	6 TTG 9 Leu 320	T GCG r Ala	'G ACA 'u Thr	r Arg r Met	ig TTG
	AAC AGA Asn Arg	GAC CGG Asp Arg	GTA TCT Val Ser	ACC TTG Thr Leu	CGC AGT Arg Ser	CAT CCG His Pro
Q	T GTC p Val	A TCC u Ser	C AAA Ir Lys	T TCC	C AAC T Asn 365	C AGC P Ser
FIG. 8D	GAC GAT ASP ASP 300	CCG GAA Pro Glu 315	AAA ACC Lys Thr	GAT TCT Asp Ser	ATC TAC Ile Tyr	TTG GAC Leu Asp 380
H	GCT Ala	ACG Thr	CAA G1n 330	GAG Glu	GAA Glu	CGT
	T GAA g Glu	A TGG u Trp	T TAT p Tyr	G ATA o Ile 345	G GAT u Asp 0	c CTG r Leu
	TGG CGT Trp Arg 295	AC GAA yr Glu	GTC GAT Val Asp	TTC CCG Phe Pro	GAC TTG Asp Leu 360	ATT ACC Ile Thr 375
	TAT TYT TYY TY	TTT T1 Phe T3 310	GAT G Asp V	TCG T	AAG G Lys A	CGC A Arg I
	TCT	CTC	GCG Ala 325	GGT Gly	CAA Gln	AAA Lys
	GCT Ala	AAC	AAA Lys	AAA Lys 340	AAT Asn	TTC
	CTT Leu	ACC Thr	GTA Val	TAC Tyr	TAC TYr 355	CGC Arg
	CTG Leu 290	AAC Asn	ATG Met	AAC Asn	AAC Asn	ACC Thr 370
	AAC Asn	CGT Arg 305	TCT	. GTC Val	CGT	GAT Asp

DOESEMB LOSLACO

29/47	1200	1248	1296	1344	1392	1440
SHEET 29/47						·
	AGC Ser 400	66c 61y	ACC Thr	TTC Phe	CAG Gln	GCC Ala 480
	GCC Ala	AGC Ser 415	ACC Thr	GTG Val	CCT	GCA Ala
	TTC Phe	TTC Phe	AAA Lys 430	GAC Asp	ACG Thr	CCT
	ACT Thr	TAC Tyr	GTG Val	AAC Asn 445	ATG Met	CCG Pro
8E	AAA Lys	TAT Tyr	CCG	TGG Trp	AAA Lys 460	ACA Th <i>r</i>
FIG. 8E	TTT Phe 395	GAT Asp	CAT	CAA Gln	ACC Thr	AAA Lys 475
r	TCG Ser	GAC Asp 410	CAG Gln	ATT Ile	CAT His	GAC Asp
	CTG	CGC Arg	ATC 11e 425	CAA Gln	GAT	TGT
	CGC Arg	AAC Asn	AGT Ser	GAC Asp 440	TAC Tyr	GCT Ala
	CAC	CTA	AGC Ser	TCT	CGT Arg 455	CAT
	CGA Arg 390	AAC Asn	ACC Thr	TCA CTG TCT Ser Leu Ser	ATC Ile	TGT Cys
	GGG G1y	GAA Glu 405	ACC	TCA Ser	GGT Gly	GAG Glu
	666 G1y	TTT Phe	CGA Arg 420	TTC Phe	GCA	GCC GAG Ala Glu
	666 61y	GAT Asp	GTT Val	GGT Gly 435	CGC Arg	AAT Asn
	CTC	CGT Arg	GTT Val	TAC Tyr	AGC Ser 450	TTG Leu
	CAA Gln 385	CGC	CGT	- AAC Asn	AGT	GAA Glu 465

DOBETTS . COLOC

SHEET 30/47	1488	1536	1584	1632	1680	1728
SHE	· .					
	CTG Leu	GTC Val	AAT Asn	ACC Thr	CTG Leu 560	ACC Thr
	CAA G1n 495	CGT	GGT	CAC	AAC Asn	CTG Leu 575
	GCG Ala	TAC Tyr 510	TCG	ACC	GCC Ala	CAG AAG Gln Lys
	GCGAla	GGC	GGT G1 <i>y</i> 525	ACC Thr	GAT Asp	
8F	TTG Leu	TCC	CAC His	ACG Thr 540	TTG	GAG Glu
FIG. 8F	66C 61y	ACT Thr	AAC Asn	CGC	ACT Thr 555	GAA Glu
•	GTC Val	ATT Ile	TAC Tyr	GAG Glu	GGT Gly	TCT Ser 570
	TTT Phe	GAC Asp 505	ACT Thr	GCC Ala	AAA Lys	CIG
	GGT Gly	TAC Tyr	TTC Phe 520	CTG AAA GCC Leu Lys Ala 535	GAA Glu	TTC
	AGC Ser	GGT Gly	TAT Tyr		AGC	AAT Asn
	TGG Trp	GTC	GTG Val	AAC Asn	CGC Arg 550	CGC Arg
	GGC Gly 485	CGT	GAA Glu	CCC	66C Gly	TAC Tyr 565
	AAA Lys	TGG Trp 500	TCC	AAT Asn	CAA Gln	AAT Asn
	TAT Tyr	GCT Ala	GCG Ala 515	CCC	CTG	AGC Ser
·	ACT Thr	CAG Gln	AAT Asn	CTG Leu 530	TCT Ser	CAA Gln
	AAC Asn	AAT Asn	CCC Pro	TGG Trp	CTC Leu 545	TAT Tyr

DSEESIS CIPIPOO

SHEET 31/47 1776	1824	1872	1920	1968	2016
SHEET			·	•	
ATG Met	ATC Ile	GTG Val	TCG Ser 640	Ser	AGC Ser
GGT	AAT Asn	AAT Asn	GGC Gly	CIG Leu 655	CCG Pro
TAC Tyr 590	CAA Gln	CIG	TTC Phe	CTG	AGT Ser 670
TAC Tyr	CAG ATG Gln Met 605	CGT Arg	CTG Leu	AGC Ser	GAA Glu
8G TAC Tyr	CAG Gln	GGC G1y 620	AAA Lys	AAC Asn	TAT Tyr
FIG. 8G AAT TAC Asn Tyr	TGG Trp	ACG Thr	TGG Trp 635	GAC Asp	GAC
ATG Met	GAA Glu	CTG	GGC Gly	GGC G1y 650	ATC Ile
CAG Gln 585	CTG Leu	GAG Glu	GAG Glu	TCG Ser	GGT G1 <i>y</i>
ACT	AAA Lys 600	ATC Ile	CCT	CTG	GCC Ala
TGT Cys	GAA Glu	GGT G1y 615	GTT Val	AAA Lys	ATT Ile
AGC	TCC	CGC Arg	TTT Phe 630	AGC	GTG Val
GTC Val	$\mathtt{T}\mathtt{A}\mathtt{T}$	ATC Ile	TCT	AAA Lys 645	AAA Lys
GAT ASP 580	CCT	AGA Arg	GCG Ala	GCG Ala	TTG Leu 660
66C 61y	AAT Asn 595	GCC Ala	GTA Val	TAT Tyr	CCG Pro
AGC Ser	AGC Ser	AAG Lys 610	AAA Lys	GGT Gly	CAG Gln
ACC Thr	TGT Cys	GAC Asp	GAC Asp 625	CTG	ACC Thr

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2160 2208 2256 2304	Ala Gln Tyr Thr Val Tyr Glu Asn Lys Gly Trp Gly AAA AAG GTA AAA GAT TAC CCG TGG CTG AAC AAG TCG Lys Lys Val Lys Asp Tyr Pro Trp Leu Asn Lys Ser 710 GAT ATG TAC GGC TTC TAC AAA CCG GTG AAA AAC CTG ASp Met Tyr Gly Phe Tyr Lys Pro Val Lys Asn Leu 730 GGC GTA TAT AAT GTG TTC AAC CGC AAA TAC ACC Gly Val Tyr Asn Val Phe Asn Arg Lys Tyr Thr Thr 740 CGC GGC CTG TAC AGC TAC ACC ACC AAC TCG GTC A150 CGC GGC TTC TAC ACC CGC AAA TAC ACC ACT Gly Val Tyr Asn Val Phe Asn Arg Lys Tyr Thr Thr 740 CGC GGC CTG TAT AGC TAC AGC ACC ACC AAC TCG A150 A160 A1		Val Val CCT Pro 705 TAT TYE TTG CAT ASP
2160	AAA AAG GTA AAA GAT TAC CCG TGG CTG AAC AAG TCG Lys Lys Val Lys Asp Tyr Pro Trp Leu Asn Lys Ser 710		
2112	GCG CAA TAC ACC GTT TAT GAA AAC AAG GGC TGG GGT Ala Gln Tyr Thr Val Tyr Glu Asn Lys Gly Trp Gly 695		
2064	GGGC GTG TTC TCC CGC CTG ACC TAT CTG GGC GCG AAA AAG p Gly Val Phe Ser Arg Leu Thr Tyr Leu Gly Ala Lys Lys 5	AAA TGG Lys Trp 675	GAA Glu
SHEET 32/47	FIG. 8H		

SHEET 33/47	2352	2379
SH	TAC Tyr	
•	AAT Asn	
٠	CGT	
	AGC Ser	
. 8I	C GCC CCA P g Ala Pro S 780	·
FIG. 81	GCC Ala	
	CG Ar	
	TA(TAA *
	CGC Arg	TTT Phe
	GAC Asp 775	AAG TTT Lys Phe
	TTA Leu	166 1rp 790
	C AAA GGC TTA GAC C y Lys Gly Leu Asp A 775	CTG GAA TGG Leu Glu Trp
-	AAA Lys	CTG
	GG G1	GTA TCG (Val Ser 1
	GAT ASP 770	GTA Val
	CGC	GCC Ala 785

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TA CAC ATG CTT CCT ATT GCC GCG CTG GTC GGC AGT ATT eu His Met Leu Pro Ile Ala Ala Leu Val Gly Ser Ile 5 10	CG GTC TTG GCA GCG GAT GAA GCT GCA ACC GAA ACC ACA ro Val Leu Ala Asp Glu Ala Ala Thr Glu Thr Thr 20	CA GAG ATA AAA GAA GTG CGC GTT AAA GAC CAG CTT AAT la Glu Ile Lys Glu Val Arg Val Lys Asp Gln Leu Asn 40	CC GTG GAA CGT GTC AAC CTC GGC CGC ATT CAA CAG GAA hr Val Glu Arg Val Asn Leu Gly Arg Ile Gln Gln Glu 55	AC AAC AAA GAC TTG GTG CGT TAC TCC ACC GAC GTC GGC 240 sp Asn Lys Asp Leu Val Arg Tyr Ser Thr Asp Val Gly 70 75	GC GGC CGT CAA AAA GGC TTT GCT GTG CGC GGC GTG er Gly Arg His Gln Lys Gly Phe Ala Val Arg Gly Val 85
CAC His	GTC Val	GAG	GTG	AAC Asn	66C 61y 85
AAA CCA TTA Lys Pro Leu	GGC AAT CCG Gly Asn Pro	GTT AAA GCA Val Lys Ala 35	CCT GCA ACC Pro Ala Thr 50	ATA CGC GAC Ile Arg Asp	AGC GAT AGC Ser Asp Ser

OGESSES CS19CC

35/47	336	384	432	480	528	576
SHEET 35/47						
	GAT Asp	TCG Ser	AAG Lys	GTG Val 160	CAA Gln	TGG Trp
	CCT	AGC Ser	GCG Ala	GGC Gly	AGG Arg 175	GAA Glu
	CTG Leu 110	AAC Asn	ATC Ile	GGC Gly	GAC AGG Asp Arg 175	CGC Arg 190
	AGC Ser	TTC Phe 125	GAA Glu	GGT Gly	GAC Asp	AAC Asn
9B	GTG Val	AAC Asn	ATC Ile 140	TTG Leu	TTG Leu	CGC Arg
FIG. 9B	GAC GGC GTG Asp Gly Val	GGC Gl.y	AAC Asn	GCA Ala 155	CTG Leu	AGC Ser
	GAC Asp	\mathtt{TAT} \mathtt{TY}	CGC Arg	GGC Gly	TTG Leu 170	AGC Ser
	ATT Ile 105	CGT Arg	GTG Val	AGC	GAT Asp	TAC TYr 185
	AGC Ser	GCA Ala 120	CTC Leu	GGT Gly	CAT His	GGT Gly
	GTC Val	TAT Tyr	GAA Glu 135	ACC Thr	GGA Gly	AAC Asn
	GGT Gly	CTG	CCC Pro	AAT Asn 150	CAA Gln	AAA Lys
	GTC Val	TCA Ser	GkC Asp	TTC Phe	CTG Leu 165	ATG Met
	CGT Arg 100	AAC Asn	ATC Ile	TCT Ser	ACC Thr	ATG Met 180
	AAC Asn	GAA Glu 115	TCT Ser	GAC Asp	CAA Gln	GTG Val
	GGC Gly	GAA Glu	CTG Leu 130	GCT Ala	TAC Tyr	GGC G1γ
	GAA Glu	TCG Ser	CGC	GGC Gly 145	AAT Asn	TTC Phe
			4 1			

DSESSES OSISCO

36/47	624	672	720	768	816	864
SHEET 36/47			•	·		
	GCT Ala	GAG Glu	GGT G1y 240	TTC	CCA	\mathtt{TAT}
	GCC Ala	GGC Gly	CGT	AAC Asn 255	GGC Gly	TCT Ser
	GAT	GCG Ala	ATC Ile	CAC His	ATC Ile 270	GAG Glu
	GTG Val 205	AGC Ser	ATT Ile	TAC Tyr	CGC	GAA Glu 285
9C	CGC	GAA Glu 220	GCA Ala	AAA Lys	CAC His	ATT Ile
FIG. 9C	AAC GAC Asn Asp	ACC Thr	GGA G1y 235	CAC	AAG Lys	ACG
(AAC GAC Asn Asp	GAG Glu	AGC Ser	AAA Lys 250	GAC Asp	TAC Tyr
	AGC Ser	CAT	GGC Gly	TCC	AAC Asn 265	AAT Asn
	GTG Val 200	GGT Gly	GCT Ala	CCG Pro	ATC Ile	CAT His 280
	GGT Gly	CGC Arg 215	GGT Gly	GAT Asp	CAA Gln	GGG G1y
	TTC Phe	CGT	GAG Glu 230	CCT	\mathtt{TAT}	CAG Gln
	GGT Gly	CAA Gln	GTA Val	ATC Ile 245	GCT Ala	CAG Gln
	CTC	TCG Ser	CCG Pro	GGT Gly	ATT Ile 260	GGC Gly
	ACA Thr 195	TAT Tyr	\mathtt{TAT}	CGC Arg	AAG Lys	AAC Asn 275
	AAT Asn	CTG Leu 210	GGC Gly	TCA Ser	GGT Gly	TTT Phe
	ACA Thr	TTG Leu	CGT Arg 225	TCG Ser	TTG	TCG Ser
			ı. <i>Y</i> /	1		

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SHEET 37/47	912	096	1008	1056	1104	1152
SHEET				·	·	
	CGG Arg	CTG Leu 320	GCG Ala	CGC	GAC Asp	CAA Gln
	AAC AGA CGG Asn Arg Arg	TGG Trp	GCG Ala 335	ACG Thr	ATG Met	TTG Leu
	AAC Asn	AAT Asn	GTG Val	766 7rp 350	AGC Ser	CAA CCG Gln Pro
	GTA Val	TCA Ser	AAA Lys	ACC Thr	AAC CGC Asn Arg 365	CAA Gln
9D	GAC Asp 300	GAT Asp	ACC Thr	TCC Ser	AAC Asn	AGC Ser 380
FIG. 9D	GCC GAT GAC Ala Asp Asp 300	CCT Pro 315	ACA Thr	TAT TYr	ATA TAC Ile Tyr	GACASp
		ACG Thr	CAG Gln 330	GAT Asp	ATA Ile	ATG Met
	GAA Glu	TGG Trp	TAT Tyr	ACG Thr 345	AAT Asn	CGT Arg
	CGC Arg	GAA Glu	GAT Asp	CCG Pro	GAG Glu 360	TTG
	766 7rp 295	TAC TYr	TTC Phe	TTC Phe	TTG	ACT Thr 375
·	TCC	TTT Phe 310	GAC Asp	TCG	GAT Asp	TTT Phe
•	Ser	CTC	GCG Ala 325	GGC Gly	AAG Lys	CGT Arg
	GCT Ala	AAC Asn	AAG Lys	AAA Lys 340	CAG Gln	AAA Lys
	ACC	GCC Ala	TTG	AAC Asn	AAT Asn 355	TTC Phe
	CTG Leu 290	AAT Asn	TCT	AAC Asn	TAT	CGA Arg 370
	AAC	CGC Arg 305	TCG	GTT Val	AAC Asn	ACC
					1	

DOETES LOS LOCA

38/47	1200	1248	1296	1344	1392	1440
SHEET						
	CGT Arg 400 .	GTA Val	\mathtt{TAT}	AGC Ser	TTG Leu	ACT Thr 480
	CGG Arg	AGA Arg 415	AAT Asn	AGC Ser	GAA Glu	AAT Asn
	AGT Ser	GAA Glu	ACT Thr 430	TTC Phe	CAG Gln	GCC Ala
	GCC	AGC Ser	ACC Thr	GAC GTG Asp Val	CCT Pro	GCA Ala
9E	TTC Phe	TTC	AAA Lys		ACG Thr 460	CCT Pro
FIG. 9E	AAA ACT Lys Thr 395	TAC	GTG Val	AAC Asn	ATG	CCG Pro 475
		TAT TYr 410	CCC Pro	TGG Trp	AAA Lys	ACA Thr
	CTT Leu	GAT Asp	CAC His 425	CAA Gln	ACC Thr	AAA Lys
	Ser	GAC Asp	CAA Gln	ATC Ile 440	CAT His	GAC Asp
	TTG	CGC Arg	ATT Ile	CAA Gln	GAT ASP 455	TGT Cys
	CGC Arg 390	AAC Asn	TCG Ser	GAT Asp	TAC Tyr	GCT Ala 470
	CAT H1s	TTA Leu 405	AGC	TCT	CGT Arg	CAT His
	CAA Gln	AAC Asn	ACC Thr 420	CTG Leu	ATC Ile	TGT Cys
	66C	GAA Glu	ACT Thr	TCA Ser 435	GAT Asp	GAG Glu
	66C 61y	TTT Phe	CGT Arg	TTC Phe	GCA Ala 450	GCC
	CTG Leu 385	GAG Glu	TCC	- GGT Gly	CGT	AAT Asn 465

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SHEET 39/47	1488	1536	1584	1632	1680	1728
SHEET						
	CAG Gln	AAT Asn	CTG Leu	TCT Ser	CAA Gln 560	AGC Ser
	AAT Asn 495	CCC Pro	TGG Trp	CTG	TAT Tyr	ACC Thr 575
	CTG	GTC Val 510	AAT Asn	ACC Thr	CTG	ACC Thr
	CAA Gln	CGT Arg	GGT G1y 525	CAC	AAC Asn	CTG
<u>9F</u>	GCG Ala	TAC Tyr	TCG Ser	ACC Thr 540	GCC Ala	AAG Lys
FIG. 9F	GCG Ala	GGC Gly	GGT Gly	ACC Thr	GAT Asp 555	CAG Gln
	TTG Leu 490	TCC Ser	CAC	AGC Ser	TTG Leu	GAG Glu 570
	GGT Gly	ACT Thr 505	AAC Asn	CGC Arg	ACT Thr	GAA Glu
	GTC	ATT Ile	TAC Tyr 520	GAG Glu	GGT Gly	TCT Ser
	GGA TTT Gly Phe	GAC Asp	ACT	GCC Ala 535	AAA Lys	TTG
	GGA Gly	TAC Tyr	TTC Phe	AAA Lys	GAA Glu 550	TTC Phe
	AGC Ser 485	GGT	TAT Tyr	CTG	AGC Ser	AAC Asn 565
	TGG Trp	GTC Val 500	GTG Val	AAC Asn	CGC Arg	CGC
	GGC Gly	CAT	GAA Glu 515	CCC	GGC Gly	TAC Tyr
	AAA Lys	TGG Trp	TCC	AAT Asn 530	CAA Gln	AAT Asn
	TAT TYr	GCT Ala	GCG Ala	CCC	CTG Leu 545	AAC Asn
						•

DOESSES COLL

DOESEES JOLIOCO

41/47	2064	2112	2160	2208	2256	2304
SHEET 41/47				·	÷	
	AAG GCC AAA Lys Ala Lys	ACG CCT TTG	GCT TAT GTG Ala Tyr Val	ACT TTG CGT Thr Leu Arg	TGG GAT TCC Trp Asp Ser 750	GAC CGA GAT Asp Arg Asp
FIG. 9H	GCG AAA 7 Ala Lys 685	CGG GGT Arg Gly 700	AAG TCG Lys Ser	A AAC CTG 3 Asn Leu	ACC ACT Thr Thr	GCG GTC Ala Val
FIG	T CTG GGT r Leu Gly	c AAG GGC n Lys Gly	G CTG AAC p Leu Asn 715	G GCT AAA u Ala Lys 730	C AAA TAC g Lys Tyr 5	C ACC AAC r Thr Asn
	G ACT TAT su Thr Tyr 680	AT GAA AAC 7r Glu Asn 95	AC CCG TGG	AC AAA CTG 7r Lys Leu	TTC AAC CGC Phe Asn Arg	AC AGC ACC /r Ser Thr 760
	TCC CGC CTG Ser Arg Leu	ACC GTT TAT Thr Val Tyr 695	AAA GAT TAC Lys Asp Tyr 710	GGC TTC TAC Gly Phe Tyr 725	AAT GTG TTC Asn Val Phe	TAT AGC TAC Tyr Ser Tyr
	GTG TTC T Val Phe S 675	CAA TAC A Gln Tyr I	AAG GTA A Lys Val I	ATG TAC G Met Tyr G	GTA TAT A Val Tyr A 740	GGT TTG TGIY GIY Leu T
	TGG GGT G Trp Gly V	GAC GCG C Asp Ala G 690	CAG AAA A Gln Lys I 705	TTT GAT A Phe Asp M	GCA GGC G Ala Gly V	CTG CGC G Leu Arg G

	GTA				
	GCC Ala				
	TAC TYE	٠			
	AAT Asn				-
16	CGT Arg				
FIG. 9	GGC Gly				
	TCA				
	GCC Ala		ပ္ပ		
	CGC Arg		ATTC		
	CGC TAC CGC GCC TCA GGC CGT AAT TAC Arg Tyr Arg Ala Ser Gly Arg Asn Tyr		TGA ATTCC	*	
	CGC		\mathtt{TLL}	Phe	190
	GAC Asp		AAG	Lys	
	TTA GAC Leu Asp		TGG	Trp	
	GC 11 y		GAT	Asp	
	AAA Lys	2	TCG CTG GAT	Leu	
	GGC AAA G Gly Lys G	•	TCG	Ser	785

2378

2352

SHEET 42/47

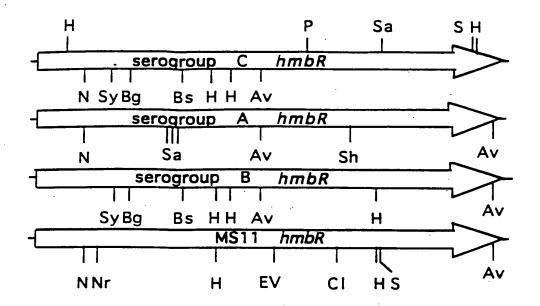


Figure 10

SHEET 43/47

DOSCETED BELLED

200	TGSGALGGGVNYQTLQGHDLLLDDRQFGVMMKNGYSSRNREWTNTLGFGV	HMBRMS11
200	TGSGALGGGVNYQTLQGRDLLLPERQFGVMMKNGYSTRNREWTNTLGFGV	HMBRC
. 200	TGSGALGGGVNYQTLQGRDLLLPERQFGVMMKNGYSTRNREWTNTLGFGV	HMBRB
200	TGSGALGGGVNYQTLQGRDLLLDDRQFGVMMKNGYSTRNREWTNTLGFGV	HMBRA
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150 150	VGVSIDGVNLPDSEENSLYARYGNFNSSRLSIDPELVRNIDIVKGADSFN VGVSIDGVSLPDSEENSLYARYGNFNSSRLSIDPELVRNIEIAKGADSFN	HMBRC HMBRMS11
150	VGVSIDGVNLPDSEENSLYARYGNFNSSRLSIDPELVRNIDIVKGADSFN	HMBRB
150	VGVSIDGVNLPDSEENSLYARYGNFNSSRLSIDPELVRNIEIVKGADSFN	HMBRA
100	ATVERVNLGKT QQEMIRDNKDLVKYSTDVGLSDSGKHQKGFAVKGVEGNK * ****** ** ****** ** ***************	HMBKMS 1 I
100	AAVERVNLNRIKQEMIRDNKDLVRYSTDVGLSDSGRHQKGFAVRGVEGNR	HMBRC
100	AAVERVNLNRIKQEMIRDNKDLVRYSTDVGLSDRSRHQKGFAIRGVEGDR	HMBRB
100	AAVERVNLNRI KQEMI RDNKDLVRYSTDVGLSDSGRHQKGFAVRGVEGNR	HMBRA
	*** * **** * ***** * ******* * * ***** *	
50	MKPLHMLPIAALVGSIFGNPVLAADEAATETTPVKAEIKEVRVKDQLNAP	HMBRMS11
50	MKPLOMPPIAALLGSIFGNPVFAXDEAATETTPVKAEVKAVRVKGORNAP MKPLOMTPTAALVGSIFGNPVFAADFAATFTTPVKAFVKAVRVKGORNAP	HMBRB HMBRC
20	MKPLQMLPIAALVGSIFGNPVLAADEAATETTPVKAEIKAVRVKGQRNAP	HMBRA
44/47	FIG. 11A SHEET 44/47	

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398	1	HMBRMS11
400	LTRNYNQKDLDEIYNRSMDTRFKRITLRLDSHPLQLGGGRHRLSFKTFAS	HMBRC
399	WETEYHKKEVGEIYNRSMDTTFKRITLRMDSHPLQLGGGRHRLSFKTFAG	HMBRB
398	WETEYHKKEVGEIYNRSMDTRFKRFTLRLDSHPLQLGGGRHRLSFKTFAS	HMBRA
349 9	VNRRRNANLFYEWTPDSNWLSSLKADFDYQTTKVAAVNNKGSFPTD-YST ****** ****** * * * * * * * * * * * *	HMBRMS11
350	VNKKKNINLFYEWTPESDRLSMVKADVDYQKTKVSAVNINGSFFI-NIII VNRRRNTNLFYEWTPESDRLSMVKADVDYQKTKVSAVNYKGSFPIEDSST	HMBRC HMBRC
348	VNRRRNANLFYEWMPDSNWLSSLKADFDYQKTKVAAIN-KGSFPT-NYTT	HMBRA
	**** ***** ** ***** **** * **** * * * *	٠
300	HKYHNFLGKIAYQINDKHRIGPSFNGQQGHNYTIEESYNLTASSWREADD	HMBRMS11
300	HKYHSFLGKIAYQINDNHRIGASLNGQQGHNYTVEESYNLLASYWREADD	HMBRC
300	HKYHSFLGKIAYQINDNHRIGASLNGQQGHNYTVEESYNLLASYWREADD	HMBRB
300	HKYHNFLGKIAYQINDNHRIGASLNGQQGHNYTVEESYNLTASSWREADD	HMBRA

250	SNDRVDAALLYSQRRGHETESAGERGYPVEGAGSGAIIRGSSRGIPDPSK	HMBRMS11
250	SNDRVDAALLYSQRRGHETESAGKRGYPVEGAGSGANIRGSARGIPDPSQ	HMBRC
250	SNDRVDAALLYSQRRGHETESAGKRGYPVEGAGSGANIRGSARGIPDPSQ	HMBRB
250	SNDRVDAALLYSQRRGHETESAGNRGYPVEGAGKETNIRGSARGIPDPSK	HMBRA
45/47	FIG. 11B SHEET 45/47	

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	FIG. 11C SHEET 46/47	16/47
HMBRA	RRDFENLNRDDYYFSGRVVRTTSSIQHPVKTTNYGFSLSDQIQWNDVFSS	448
HMBRB	QRDFENLNRDDYYFSGRVVRTTNSIQHPVKTTNYGFSLSDQIQWNDVFSS	449
HMBRC	RRDFENLNRDDYYFSGRVVRTTSSIQHPVKTTNYGFSLSDQIQWNDVFSS	450
HMBRMS11	RREFENINRDDYYFSERVSRTTSSIQHPVKTTNYGFSLSDQIQWNDVFSS	448
HMBRA	RAGIRYDHTKMTPQELNAECHACDKTPPAANTYKGWSGFVGLAAQLNQAW	498
HMBRB	RAGIRYDHTKMTPQELNADCHACDKTPPAANTYKGWSGFVGLAAQLSQTW	499
HMBRC	RAGIRYDHTKMTPQELNAECHACDKTPPAANTYKGWSGFVGLAAQLNQAW	200
HMBRMS11	RADIRYDHTKMTPQELNADCHACDKTPPAANTYKGWSGFVGLAAQLNQAW**,**********************************	498
HMBRA	RVGYDITSGYRVPNASEVYFTYNHGSGNWLPNPNLKAERSTTHTLSLQGR	548
HMBRB	RVGYDVTSGFRVPNASEVYFTYNHGSGTWKPNPNLKAERSTTHTLSLQGR	549
HMBRC	RVGYDITSGYRVPNASEVYFTYNHGSGNWLPNPNLKAERTTHTLSLQGR	550
HMBRMS11	HVGYDITSGYRVPNASEVYFTYNHGSGNWLPNPNLKAERSTTHTLSLQGR	548
HMBRA	SEKGMLDANLYQSNYRNFLSEEQKLTTSGTPGCTEENAYYSICSDPYKEK	598
HMBRB	GDKGTLDANLYQSNYRNFLSEEQNLTVSGTPGCTEEDAYYYRCSDPYKEK	599
HMBRC	SEKGTLDANLYQSNYRNFLSEEQKLTTSGDVSCTQMNYYYGMCSNPYSEK	009
HMBRMS11	ANLYQNNYRNFLSEEQNLTTSGDVGCTQMNYYYGMCSNPY	298
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	FIG. 11D SHEET 47/47	41/41
HMBRA	LDWQMKNIDKARIRGIELTGRLNVDKVASFVPEGWKLFGSLGYAKSKLSG	648
HMBRB	LDWQMKNIDKARIRGIELTGRLNVDKVASFVPEGWKLFGSLGYAKSKLSG	649
HMBRC	LDWQMQNIDKARIRGLELTGRLNVDKVASFVPEGWKLFGSLGYAKSKLSG	650
HMBRMS11	PEWQMQNIDKARIRGLELTGRLNVTKVASFVPEGWKLFGSLGYAKSKLSG	648
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HMBRA	DNSLLSTQPLKVIAGIDYESPSEKWGVFSRLTYLGAKKVKDAQYTVYENK	869
HMBRB	DNSLLSTQPLKVIAGIDYESPSEKWGVFSRLTYLGAKKVKDAQYTVYENK	669
HMBRC	DNSLLSTQPLKVIAGIDYESPSEKWGVFSRLTYLGAKKVKDAQYTVYENK	700
HMBRMS11	DNSLLSTQPPKVIAGVDYESPSEKWGVFSRLTYLGAKKAKDAQYTVYENK	869
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HMBRA	GWGTPLQKKVKDYPWLNKSAYVFDMYGFYKPVKNLTLRAGVYNLFNRKYT	748
HMBRB	GWGTPLQKKVKDYPWLNKSAYVFDMYGFYKPAKNLTLRAGVYNLFNRKYT	749
HMBRC	GWGTPLQKKVKDYPWLNKSAYVFDMYGFYKPVKNLTLRAGVYNVFNRKYT	750
HMBRMS11	GRGTPLQKKVKDYPWLNKSAYVFDMYGFYKLAKNLTLRAGVYNVFNRKYT	748
HMBRA	TWDSLRGLYSYSTTNAVDRDGKGLDRYRAPGRNYAVSLEWKF	790
HMBRB	TWDSLRGLYSYSTTNAVDRDGKGLDRYRAPGRNYAVSLEWKF	791
HMBRC	TWDSLRGLYSYSTTNSVDRDGKGLDRYRAPSRNYAVSLEWKF	792
HMBRMS11	TWDSLRGLYSYSTTNAVDRDGKGLDRYRASGRNYAVSLDWKF	190
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